Near Real-Time Crash Data During Highway Reconstruction

(I-235 through Des Moines)

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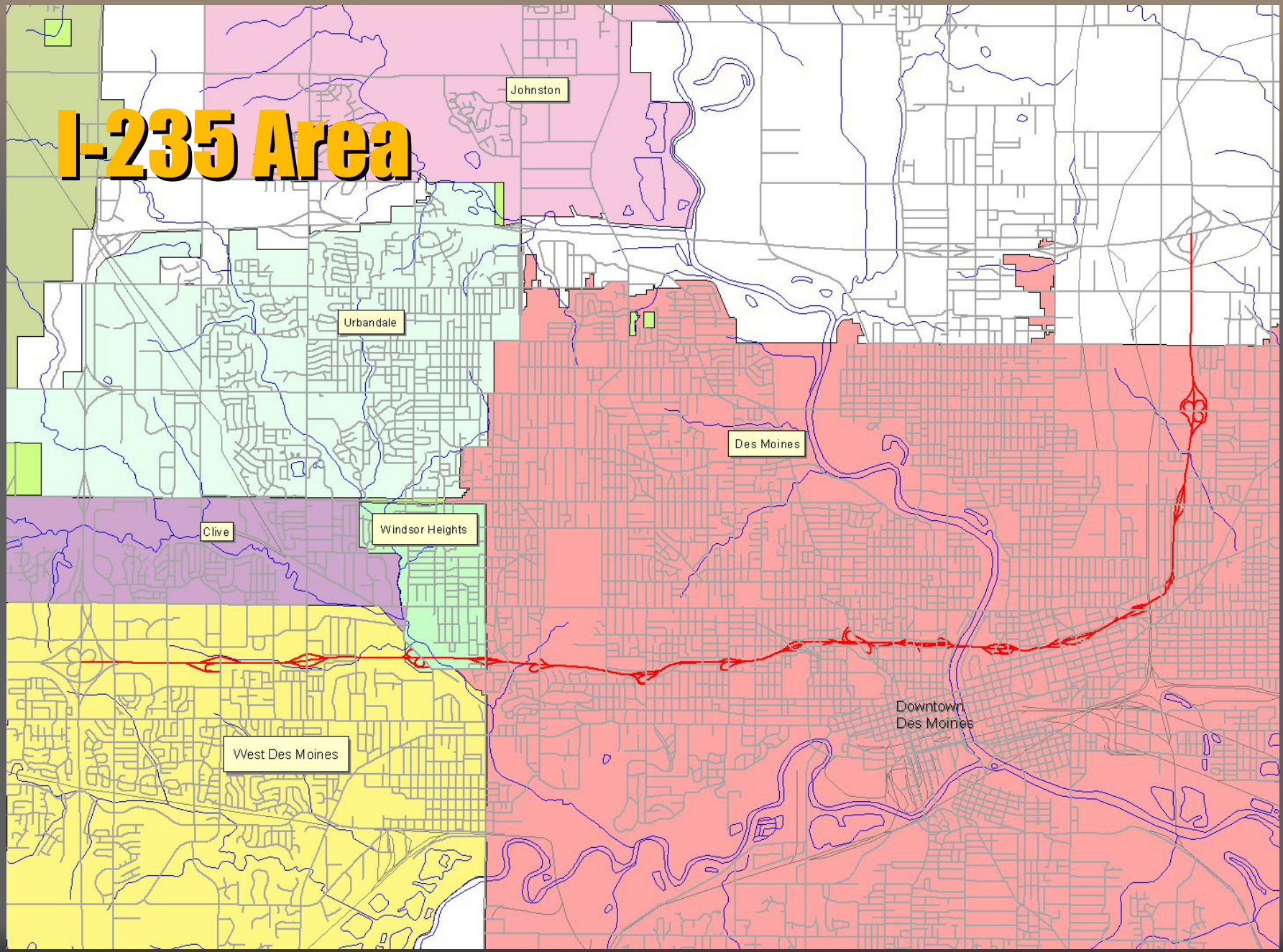
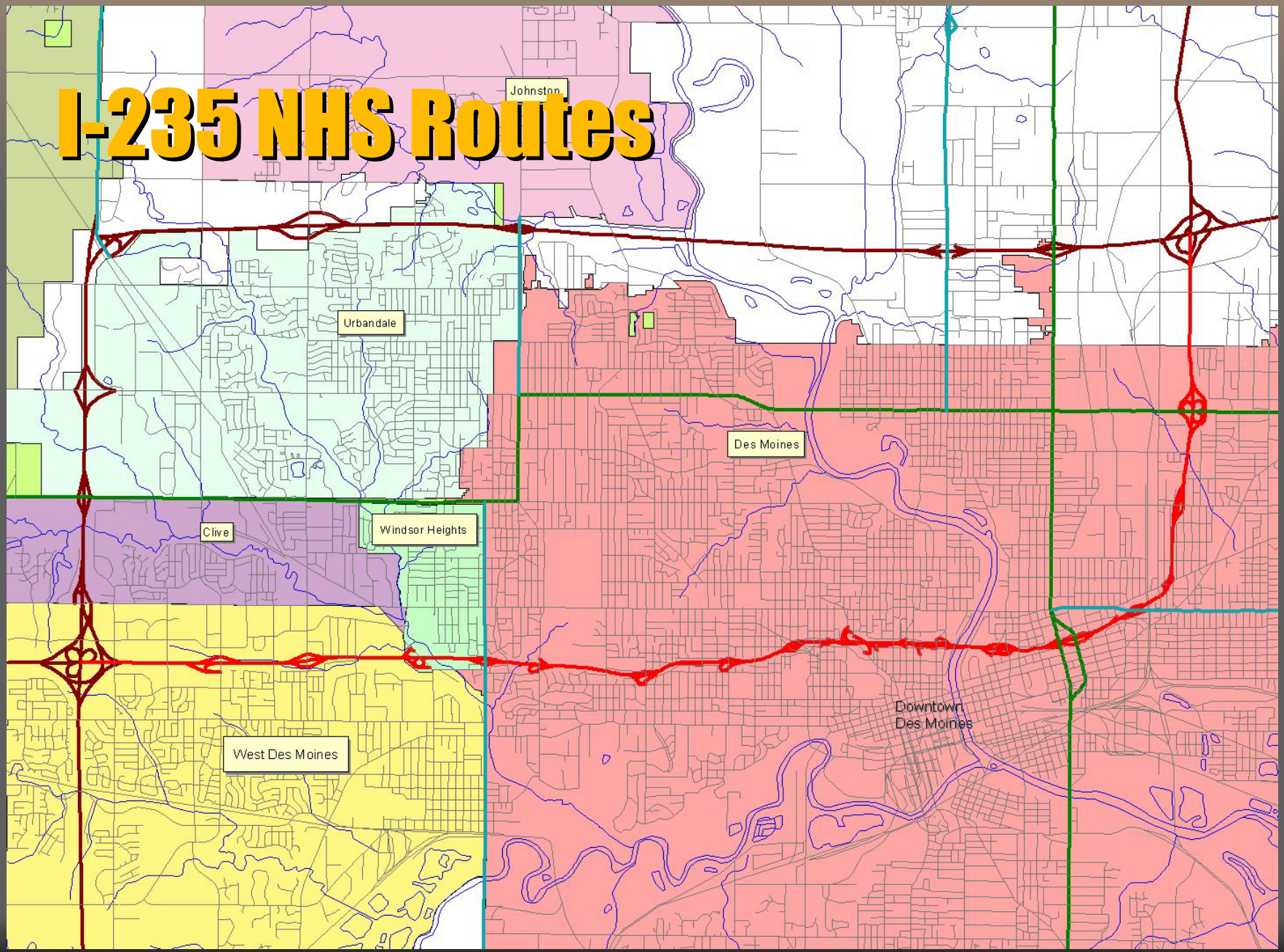
I-235 Reconstruction

- Currently reconstructing ramps and bridges
  - Mainline traffic not diverted
  - Paths to downtown Des Moines affected
    (bridge implosions, ramp closings, traffic diversions)
- Mainline begins next year (in stages)
  - Mainline traffic diversion → arterials
- TMC not fully functional or equipped


I-235 Area
Johnston
Urbandale
Des Moines
Clive
Windsor Heights
West Des Moines
Downtown
Des Moines

I-235 NHS Routes



Crash Data Collection

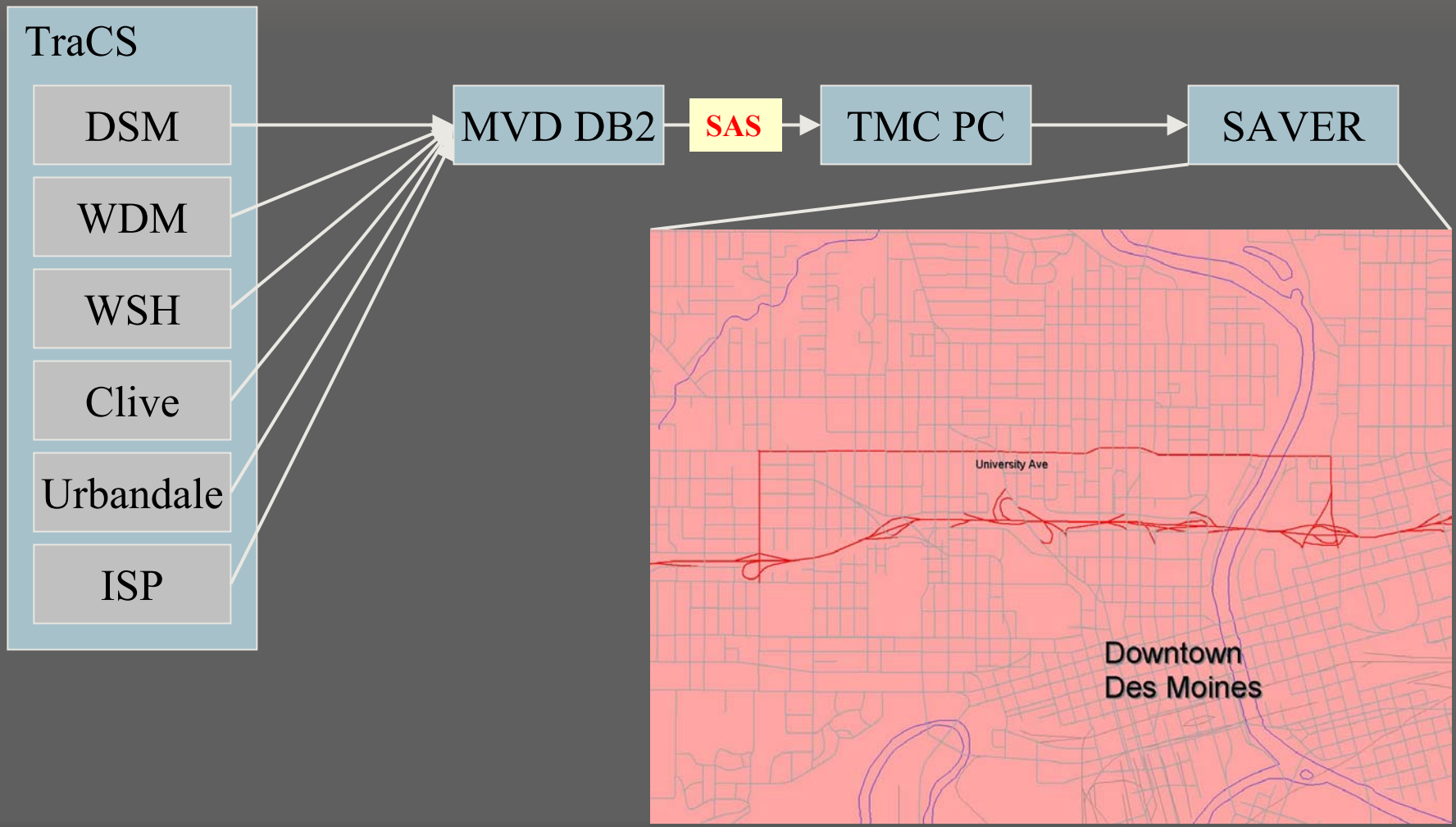
- TraCS used along corridor
  - Des Moines, West Des Moines, Clive, Urbandale, Windsor Heights, State Patrol
- Daily transmission → DOT MVD → DB2

I-235 Project Team Desires

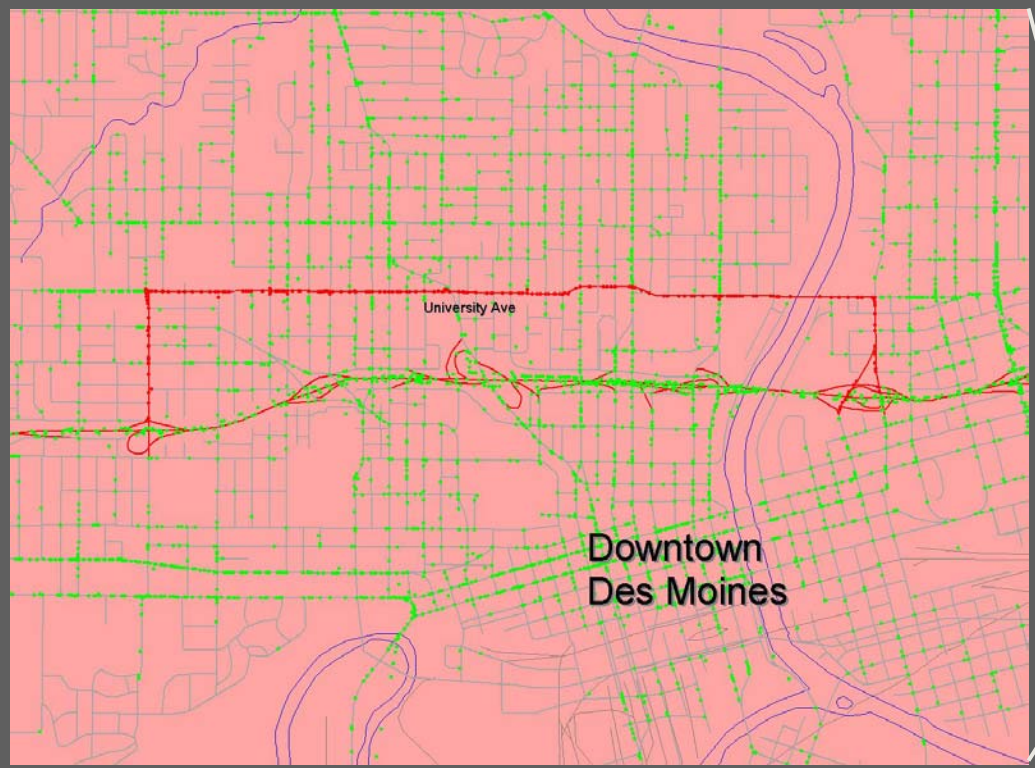
- Real-time (weekly) assessment of impacts
  - Traffic
  - Safety
- Initial: All reports on paper → TMC

- w/ TraCS → DB2, electronic transfer available
  - TraCS → DB2 → TMC

Solution


TraCS
DSM
WDM
WSH
Clive
Urbandale
ISP
MVD DB2
SAS
TMC PC
SAVER
University Ave
Downtown
Des Moines

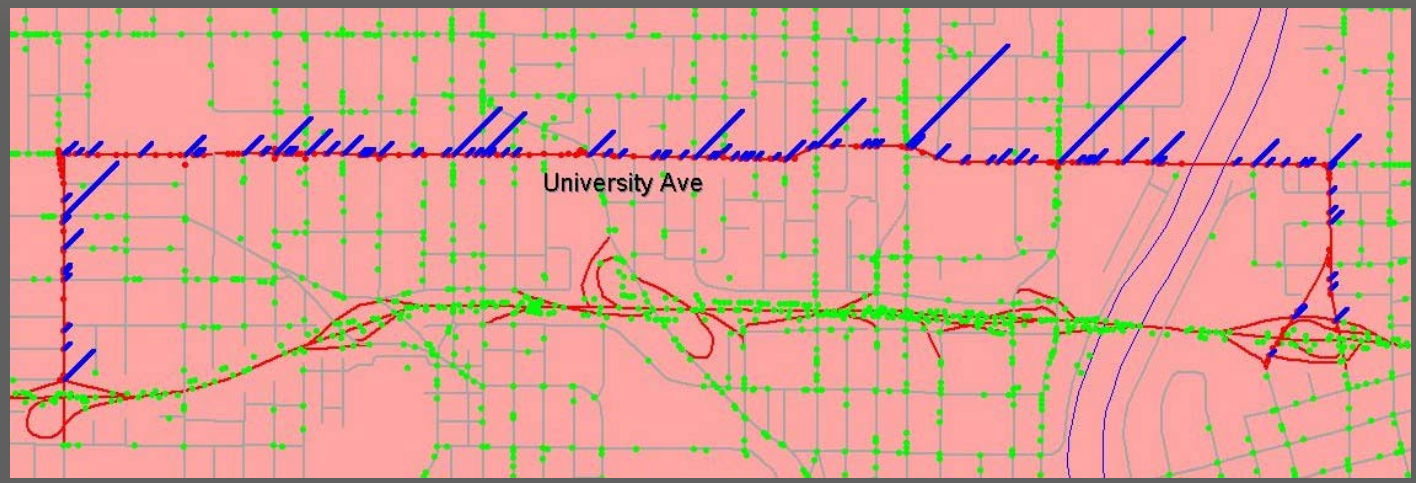
DB2 → PC



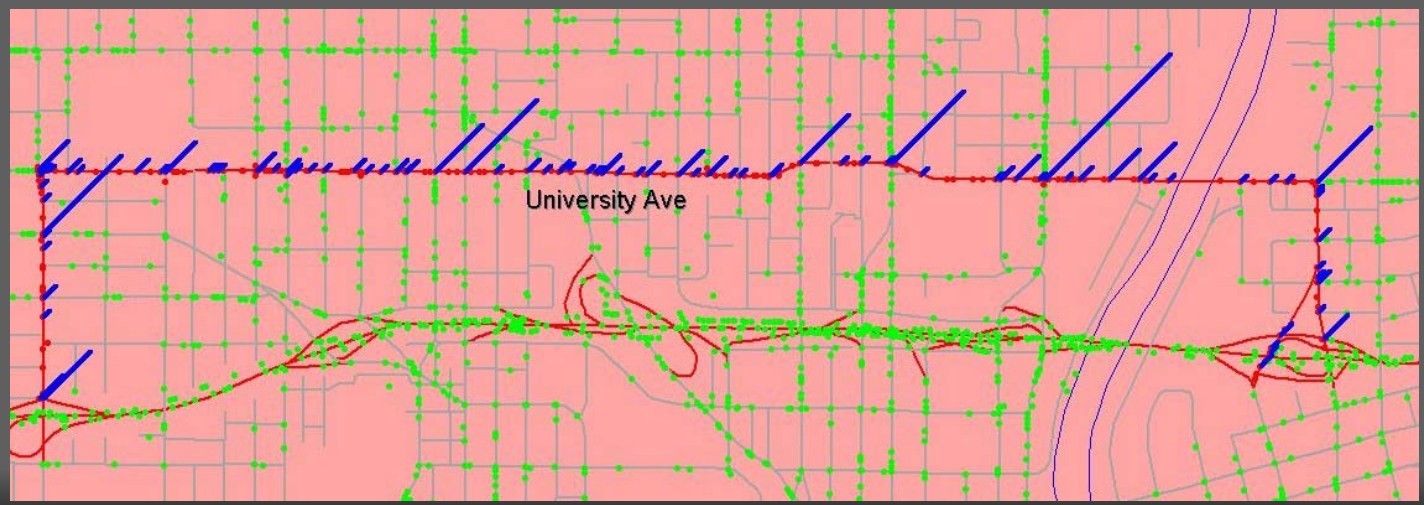
TMC PC → PC SAS → DOT Mainframe → Mainframe SAS → DB2 → Mainframe SAS → Mainframe SAVER format → Mainframe SAS → TMC PC → PC SAVER format

Comparison Maps - Total

Before

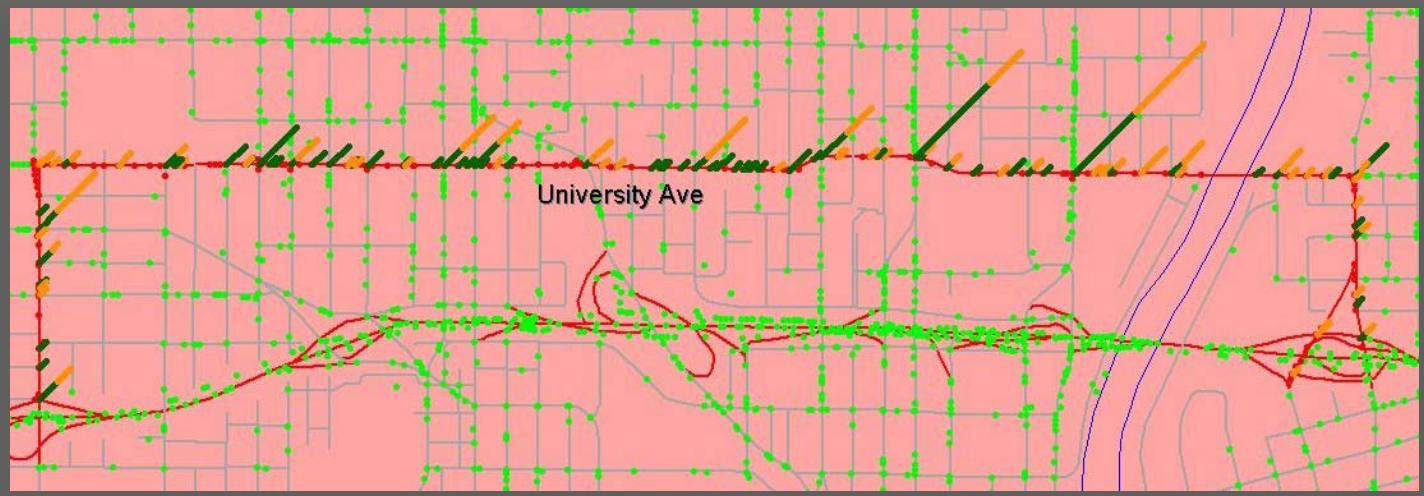


After

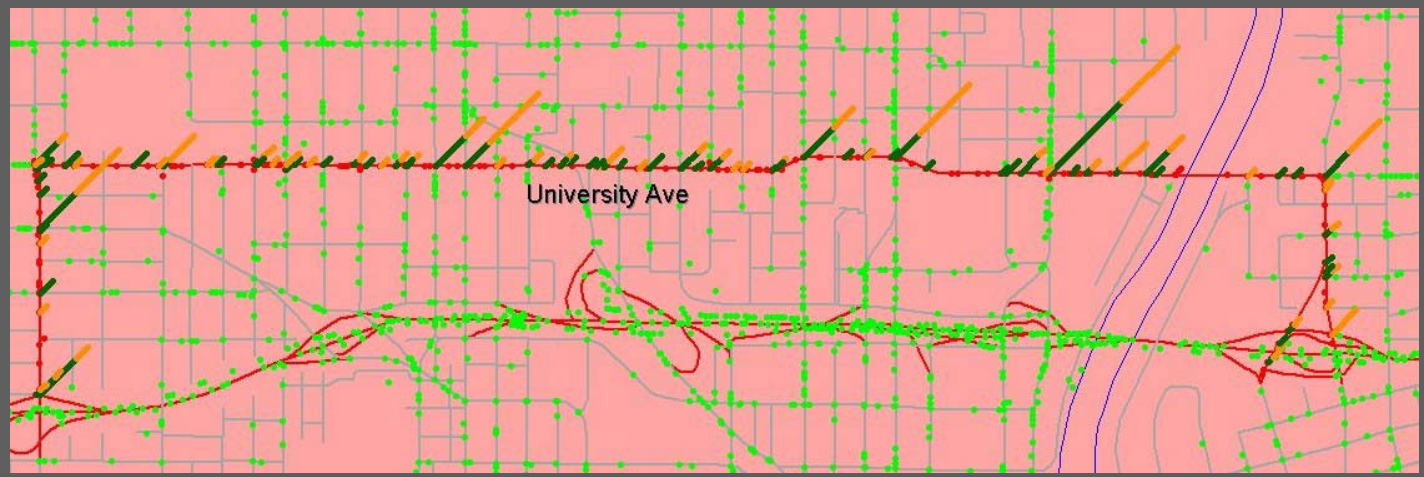


Comparison Maps - Severity

Before



After



TMC Needs

- Computer
- SAS → ~ $1000-$1500
- ArcView 3.3 → ~ $1200
- SAVER → no cost

Beyond TMC

- DOT-wide → Districts via DOT LAN (monthly)
- ISP → Central + ISP LAN (monthly?)
- Outside DOT → CDs (quarterly)